Work Ordo <i>May 7, 2010 10</i>		462									Page 1
Item ID:	D412-702-34	4 1		Accept					Setup Sta	rt	
Revision ID:									стир Зта		
Item Name:	13-Man Shoul	der Harness, 3 point	t						Sto	op	
Start Date:	07/05/2010	Start Qty: 1.00			Cust Item I	D·				* (*********	
Required Date:	11/05/2010	Req'd Qty: 1.00			Customer:			•			
Reference:											
Approvals:	Process Pla	n: N	Date: 1050	7 Tooling:	De	ıte:	_	F	Run Sta	rt	
rippi ovais.		····	-	_		_			Sto		
	QC:		Date:	SPC (Y/N):	Da	ite:					
Sequence ID/ Work Center II)	Operation Description		Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept	Reject	Reject	Insp.
Draw Nbr		ision Nbr		Kuii 110u15	Number	Nev.	Coue	Qty	Qty	Number	Stamp
DSI9511	A										
100	A	N. C.		0.00							
		DOCUMENT CONT	TROL	0.00							
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105 Liediai nen eriai din iaad		Pick Kit		0.00				/ 6 - 7			
Packaging	* *			0.00			,	1076	0 0 3	12	<u> </u>
Packaging		Memo		,υ.υυ							\
											1

110

QC4- 100% Inspect kits for completeness

Memo

0.00 Siololo 23

Quality Control

Work Order ID 58462

May 7. 2010 10:21:30 AM



Page 2

Item ID:

D412-702-341

Accept



Setup Start

Stop



Revision ID:

Item Name:

13-Man Shoulder Harness, 3 point

Start Date:

07/05/2010

Start Otv: 1.00

Required Date: 11/05/2010 **Rea'd Oty:** 1.00



Cust Item ID:

Customer:

Draw

Number

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Draw

Rev.

Plan

Code

Start Run



QC:

Date: ____

SPC (Y/N):

Date:

Stop

Sequence ID/ **Work Center ID**

120

Packaging

Packaging

Operation Description

Packaging

Set Up/ Run Hours

0.00

0.00

Identify and pack for shipping as per PPP D412-702-341

Location:

PPP Rev:

Memo

130

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

Reject Reject Otv

Insp. Samp Number

Accept

Oty

10/06/24°.

May 7, 2010 10:21:35 AM

Work Order ID: 58462

Parent Item:

D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

Comments:

IPP Rev: A new issue DD 10.04.30 verified: FC



Start Date: 07/05/2010

Required Date: 11/05/2010

Start Otre 1 00

									Start Qty: 1.00	Required Qty: 1.00	
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch		Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit Qty Issued	Date St Issued	atus
D412-702-301 Harness Assembly	####	Manufactured	No			105	Each	0.0000	2 358 45	559933 559933	/o-6ə3
D412-702-303 Harness Assembly	1811 181 1888 181 1888 188 18	Manufactured	No			105	Each	0.0000	B5845	() B59922	10.63
D412-702-305 Harness Assembly		Manufactured	No			105	Each	0.0000	BSS BY	5 10-6-335	ρ
D412-702-307 Harness Assembly		Manufactured	No			105	Each	0.0000	Bigur	9 16.6-235	2
D412-702-309 Harness Assembly		Manufactured	No			105	Each	0.0000	<u>1</u> 3596	56-2-01 FK	\$
D412-702-311 Harness Assembly		Manufactured	No			105	Each	0.0000	3.59	64€ 10°6	235/
D412-702-313 Harness Assembly		Manufactured	No			105	Each	0.0000	B596	49 10.6-	235/
D412-702-315 Harness Assembly		Manufactured	No			105	Each	0.0000	B596	=50 10-6	201
D412-702-317		Manufactured	No			105	Each	0.0000	B596	,51 10.6°	-350

Page 1

May 7, 2010 10:21:35 AM

Work Order ID: 58462

Parent Item:

D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

IPP Rev: A new issue DD 10.04.30 verified: EC



Start Date: 07/05/2010

Required Date: 11/05/2010

	Comments: IP	P Rev:A new issu	e DD 10.04.30	verified	i:EC					Start Qty: 1.00	Re	quired Qty:	1.00
	Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
5	D412-702-321 Harness Assembly		Manufactured	No			105	Each	0.0000	1	B39650	16-	6.234
5	D412-702-323 Harness Assembly		Manufactured	No			105	Each	0.0000		3 5 9652	/0	·6 ·23C
5	D412-702-059 /		Manufactured	No			105	Each	11.0000	<u> 2</u>	155670	(0.6	. 23 S
					Location		Loc		Loc Code				
,	D3761-1		\		FG122	55670		11 10					
/	D3761-1-041 HOOK & LOOP STRIP		' Manufactured	No		57202	105	I Each	3.0000	- 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1) 35542°) <u>(6-(</u>	~23C)
					Location		Loc	<u>Oty</u>	Loc Code				\
	1				ST245	57662		3					١
ク	D3542-1 /		Manufactured	No		.,	105	Each	13.0000		, e.93	sl	
					Location		Loc	<u>Oty</u>	Loc Code			•	
					~	32606 47140		13 2 3					
						51309		8		4			

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• Work Order ID: 58462

D412-702-341



Parent Item Name: 13-Man Shoulder Harness, 3 point

Parent Item:

Start Date: 07/05/2010

Required Date: 11/05/2010

	Comments:	IPP Rev:A new issi	ue DD 10.04.30	verifie	i:EC				5	Start Qty: 1.00)	Required Qty: 1.00
	Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Status Issued
J	D3571-1 Guide		Manufactured	No			105	Each	17.0000	· · · · · · · · · · · · · · · · · · ·) 0 14 25 3	B58 450
6			Manufactured	No	Location ST245A	47141 57226	<u>Loc (</u>	Oty 17 7 10 Each	Loc Code 18.0000		4x 1 547149	10.6.238
/ ·	Guide D3572-041		Manufactured	No	Location ST245A	57227 57363	<u>Loc 0</u>	Oty 18 8 10 Each	Loc Code 4.0000	-	; ;	
5	Guide Assembly D3578-041 Doubler		Manufactured	No	<u>Locatior</u> ST260	55679	<u>Loc (</u>	Otv 4 4 Each	Loc Code 110.0000	. 1	D 6 7	23S
	Doubici	•			Location ST244A	51640 52071		Oty 110 2 108	Loc Code	<u></u>		

May 7, 2010 10:21:35 AM

Page 4

Work Order ID: 58462

Parent Item: I

D412-702-341

D412-70

Parent Item Name: 13-Man Shoulder Harness, 3 point



Start Date: 07/05/2010

Required Date: 11/05/2010

Comments:	IPP Rev:A new iss	ue DD 10.04.30	verified	i:EC					tart Date: 07/0 Start Qty: 1.00		Required Date: Required Qty:	
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch		Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
D3610-041		Manufactured	No			105	Each	15.0000		10.6.	235/	
				<u>Location</u> ST244A	47144	<u>Loc (</u>	Qty 15 15	Loc Code	- -	2		
D3618-1		Manufactured	No			105	Each	84.0000	1	·- 6-9	35	
} AN4-10A 		Purchased	No	Location ST244A	55669	<u>Loc (</u>	84 84 Each	Loc Code 155.0000	10 A	r S 13)	D	
ÄN4-16A		Purchased	No		111425 112969 113422 114523		0ty 155 4 1 50 100 Each	Loc Code 165.0000		-(")	.O	
Bolt					114129 114330	<u>Loc C</u>	165 15 50	Loc Code				

100

114523,

May 7, 2010 10:21:35 AM

Page 5

Work Order ID: 58462

Parent Item:

D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

IPP Rev: A new issue DD 10.04.20



Start Date: 07/05/2010

Required Date: 11/05/2010

Comments:	PP Rev:A new issu	ie DD 10.04.30) verified	d:EC				5	Start Qty: 1.00		Required Qty:	1.00
Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
AN4-25A J BOLT		Purchased	No			105	Each	106.0000	4	. 6.93	-	SZ
				Location ST360	104438 111605 114330	Loc	Oty 106 6 50 50	Loc Code	_ <u>P</u>			\
AN4-27A }		Purchased	No		114330	105	Each	26.0000	, 4 <u>b</u>	· <i>k</i> -3>		2
				Location ST360	•	<u>Loc</u>	26	Loc Code	<u> </u>			
N4-44A		Purchased	No	_	113538	105	26 Each	94.0000	10	٠6- ع٢		
				Location ST360	104806	Loc	<u>Oty</u> 94 94	Loc Code	a			1
1S24693-S274` , 1111 111111111111111111111111111111)	Purchased	No	•		105	Each	20.0000	10	.6.23		5
				Location ST288	108560	<u>Loc (</u>	Oty 20 20	Loc Code	ð			/

May 7, 2010 10:21:35 AM

Page 6

Work Order ID: 58462

D412-702-341



Parent Item Name:

13-Man Shoulder Harness, 3 point

Comments:

Parent Item:

IPP Rev: A new issue DD 10.04.30 verified EC

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Start Date: 07/05/2010

Required Date: 11/05/2010

Start Oty 1 00

Paguired Oty: 1.00

	Comments:	IPP Rev:A new iss	ue DD 10.04.	30 verifie	d:EC					Start Qty: 1.00)	Required Qty: 1	.00
	Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch		Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
(MS24694-S56 SCREW		Purchased	No			105	Each	131.0000		10-E-5	138/	
					Location		Loc (<u>Qty</u>	Loc Code				
(MS24694-S58		Purchased	No	ST289A	104407	105	131 131 Each	144.0000	/10	3		
	Screw									<u> </u>	1-6-97) A)	
					Location ST289A	104407	Loc	<u>Otv</u> 144 144	Loc Code	$\overline{1}$	2		
5	MS24694-S60		Purchased	No			105	Each	123.0000	/ <u>/</u> /	/ -6-2	3 sD	
					Location		Loc (<u>Oty</u>	Loc Code				
					ST289A	104407		123		_			
(AN960JD416		Purchased	No		104407	105	123 Each	0.0000	1 26), 		
	Washer										MIISO	000 10-6	.235/
8	AN960JD416L Washer	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Purchased	No			105	Each	465.0000	(4)	10-6	1238	
		•			Location		<u>Loc (</u>	Qty	Loc Code	•		,	
					ST346	110153		465 465		· _	<u> </u>		
					-								

May 7, 2010 10:21:35 AM

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Work Order ID: 58462

Parent Item:

D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point



Start Date: 07/05/2010

Required Date: 11/05/2010

	Comments:	IPP Rev:A new issi	ue DD 10.04.30	verified	d:EC				S	Start Qty: 1.00		Required Qty:	1.00
	Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Qty Issued	Date Issued	Status
5	MS21042L4	HATAN AN ANA MAN	Purchased	No			105	Each	2,408.000	DEGICA Ó	1 14714	10-6	23 \$
					Locatio	<u>n</u> .	Loc	<u>Oty</u>	Loc Code				1
					ST139			2					
						111827		2					
					ST300		2	2098					
						113422		96		_			
						114523	1	994					
						9063		8					
					ST463			308					
	+					114416		308		_			
	CR3212-4-4		Purchased	No			105	Each	88.0000	24	7	()
>	Cherry Rivet								• •		10-6	32 Cf	
					Location	<u>1</u>	Loc (<u>Oty</u>	Loc Code				
			•	e.	ST311			88					

111359

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D412-702 REV. E AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D412-702 REV. 3 REF TCCA STC SH04-7

REFERENCE ONLY

REF FAA STC SR01997NY REF EASA STC EASA.I.M.R.S.00710

This service instruction adds several kits equipped with improved inertia reels:

The Dart **D412-702-341** 13-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for all 13 passenger seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-041B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-343** 5-Man Forward Facing Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 5 forward facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-043B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-345** 4-Man Shoulder Hamess Kit provides 3-point hamesses with inertia reels and joined lap and shoulder belts for the 4 aft facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-045B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-347** 4-Man Shoulder Harness Kit provides 3-point harnesses with inertia reels and joined lap and shoulder belts for the 4 side facing seating positions in the aircraft cabin. The kit also contains hardpoints for securing the harnesses. The harnesses for this kit meet the requirements of TSO-C114 and replace the existing lap belts. This kit should be installed similar to the D412-702-047B kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-349** 1-Man Shoulder Harness Kit provides a 3-point harness with an inertia reel and joined lap and shoulder belts for the center forward facing seating position in the aircraft cabin. The kit also contains hardpoints for securing the harness. The harness for this kit meets the requirements of TSO-C114 and replaces the existing lap belts. This kit should be installed similar to the **D412-702-049B** kit, as detailed in Table 1 of this service instruction.

The Dart **D412-702-351** 1-man 3-point shoulder hamess kits are available for the outboard seats of the 5-man forward facing bench in Bell 205/212/214/412 model aircraft. The kit can be installed LH or RH. These kits should be installed similar to the D412-702-051B/-052B kits, as detailed in Table 1 of this service instruction.

The Dart **D214-702-337** 5-Man Aft Facing Shoulder Harness Kit provides 3-point harnesses with inertial reels and joined lap and shoulder belts for the 5-man aft facing seat installed in the Bell 214B/B1 model aircraft. This kit should be installed similar to the D214-702-037B kit, as detailed in Table 1 of this service instruction.

The Dart **D205-702-353** 4-Man Aft Facing Shoulder Harness Kit provides 3-point harnesses with inertial reels and joined lap and shoulder harnesses for the 4-man aft facing seat installed in the UH-1 model aircraft. This kit should be installed similar to the D205-702-053B kit, as detailed in Table 1 of this service instruction.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

BY: D. SHEPHERD (DE # 02)

DATE: 10.03.22 CERT. NO.: SH04-7 ISSUE NO.: 3

Α	NEW IS	SSUE		CP	10.03.18
REV.			DESCRIPTION	BY	DATE
DESIGN		P	DART AEROS	SPACE	LTD
DRAWN		9?	HAWKESBURY, ON		
CHECKE	D	_b	DRAWING NO.		REV. A
MFG. AP	PR.	N/A	DSI 9511	:	SHEET 1 OF 6
APPRO\	/ED	140,	TITLE		SCALE
DE APP	₹.	#	NEW SHOULDER HARN	ESS KITS	NTS
DATE	10.0	3.18	COPYRIGHT © 2010 BY DA THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SI NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COM WRITTEN PERMISSION FROM D.	JPPLIED ON THE EXPRE	SS CONDITION THAT IT IS · ·

Dart Aerospace Ltd

W/O:			WO	RK ORDER CHAN	CEC					
DATE	STEP	PRO	OCEDURE CHAN	**************************************	GLS	Ву	Date	Qty	Approval Chief Eng /	Approval
						-			Prod Mgr	QC Inspector
1										
										
Part No	:	PAR #:	Fault Categ	jory:	NCR	: Yes N	o DQA	i:	_ Date: _	
	Res	solution:	Disposition); <u></u>	QA:	N/C Clos	sed:		Date: _	
NCR:		,	WORK ORDE	R NON-CONFORM	MANCE	(NCR)				
· · ·	T	Description of NC		Corrective Action Se	ection B		Verifica		A	A
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	n	Sign & Date	Section		Approval Chief Eng	Approval QC Inspector
·										
							ł			<u> </u>
						•				
									·	

NOTE: Date & initial all entries

REFERENCE ONLY

INSTALLATION

The Dart D412-702-3XX kits should be installed similar to the kits in Installation Instructions IIN-D412-702 Rev. E or Dart Service Instruction (DSI) listed below:

TABLE 1

Part Number	Description	Install similar to:
D412-702-341	Shoulder Harness Kit	D412-702-041B (IIN-D412-702, DSI 9408)
D412-702-343	Shoulder Harness Kit	D412-702-043B (IIN-D412-702, DSI 9453 [214], DSI 9408)
D412-702-345	Shoulder Harness Kit	D412-702-045B (IIN-D412-702, DSI 9469)
D412-702-347	Shoulder Harness Kit	D412-702-047B (IIN-D412-702, DSI 9408)
D412-702-349	Shoulder Harness Kit	D412-702-049B (IIN-D412-702, DSI 9408)
D412-702-351	Shoulder Harness Kit	D412-702-051B (LH) (DSI 9397, DSI 9408) D412-702-052B (RH) (DSI 9397, DSI 9408)
D214-702-337	Shoulder Harness Kit	D214-702-037B (DSI 9454)
D205-702-353	Shoulder Harness Kit	D205-702-053B (DSI 9460)
D412-702-301	Harness Assembly	D412-702-101B (IIN-D412-702)
D412-702-303	Harness Assembly	D412-702-103B (IIN-D412-702)
D412-702-305	Harness Assembly	D412-702-105B (IIN-D412-702)
D412-702-307	Harness Assembly	D412-702-107B (IIN-D412-702)
D412-702-309	Harness Assembly	D412-702-109B (IIN-D412-702)
D412-702-311	Harness Assembly	D412-702-111B (IIN-D412-702)
D412-702-313	Harness Assembly	D412-702-113B (IIN-D412-702)
D412-702-315	Harness Assembly	D412-702-115B (IIN-D412-702)
D412-702-317	Harness Assembly	D412-702-117B (IIN-D412-702)
D412-702-319	Harness Assembly	D412-702-119B (DSI 9454)
D412-702-321	Harness Assembly	D412-702-121B (DSI 9454, DSI 9469)
D412-702-323	Harness Assembly	D412-702-123B (DSI 9454, DSI 9469)

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-0-01

BY: D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN	P	DART AEROSPACE LTD						
DRAWN	93	HAWKESBURY, ONTARIO, CANADA						
CHECKED	_\$	DRAWING NO.	REV. A					
MFG. APPR.	N/A	DSI 9511	SHEET 2 OF 6					
APPROVED	140	TITLE	SCALE					
DE APPR.	#	NEW SHOULDER HARNESS KITS	NTS					
DATE 10.0	3.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WITTEN PERMISSION FROM DART AEROSPACE LTD.						

Dart Aerospace Ltd

W/O:			W	ES						
DATE	STEP	PRO	CEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector	
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A :	_ Date: _		
	R	esolution:	Dispositio	n:	_ QA: N/C CI	osed:		Date: _	<u> </u>	
NCR:		1	WORK ORD	ER NON-CONFORMA	ANCE (NCF	R)				
DATE	STEP	Description of NC	ion of NC Corrective Action Section I				cation	Approvai	Approval	
		Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	* Sect	Section C	Chief Eng	QC Inspector	
			,			<u> </u>				
			-							
,										
	1				1				1	

NOTE: Date & initial all entries

REFERENCE ONLY

PARTS LIST

TABLE 2

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
x						D412-702-341	Dart 13-Man 3-Point Shoulder Harness Kit
	x					D412-702-343	Dart 5-Man 3-Point Forward Facing Shoulder Harness Kit
; ;		Х				D412-702-345	Dart 4-Man 3-Point Aft Facing Shoulder Harness Kit
,			х			D412-702-347	Dart 4-Man 3-Point Side Facing Shoulder Harness Kit
				х		D412-702-349	Dart 1-Man 3-Point Forward Shoulder Harness Kit
FR CO.					Х	D412-702-351	Dart 1-Man 3-Point Shoulder Harness Kit
1	1		1	1		D412-702-059 /	GROMMET KIT
/ 9	5		4	1	1	D3761-1-041	HOOK AND LOOP STRIP (DSI 9408)
<u> </u>						,	
' 2	1		1			D412-702-301 '	HARNESS ASSEMBLY (NEW)
1*	1*		1*			D3573-7	ADAPTER
1*	1*		1*			D4088-041	SHOULDER HARNESS (NEW)
4*	4*		4*			MS24693S272	SCREW
4*	4*		4*			AN960JD10LL	WASHER
4*	4*		4*			MS21042L3	NUT
. 2	1		1			D412-702-303	HARNESS ASSEMBLY (NEW)
1*	1*		1*			D3573-8	ADAPTER
1*	1*.		1*			D4088-041	SHOULDER HARNESS (NEW)
4*	4*		4*			MS24693S272	SCREW
4*	4*		4*			AN960JD10LL	WASHER
4*	4*		4*			MS21042L3	NUT
		và-				5440 700 005	HARVES ASSESSED ASSESSED.
1 1*	1			1		D412-702-305	HARNESS ASSEMBLY (NEW)
				1*		D3573-1	ADAPTER
1*	1* 4*			1* 4*		D4088-041	SHOULDER HARNESS (NEW)
4*	4*			4*		MS24693S273	SCREW
4* 4*	4* 4*			4*		AN960JD10LL	WASHER
4	4			4		MS21042L3	NUT
. 1	1				1	D412-702-307	HARNESS ASSEMBLY (NEW)
1*	1*				1*	D3573-3	ADAPTER
1*	1*				1*	D4088-041	SHOULDER HARNESS (NEW)
4*	4*				4*	MS24693S272	SCREW
4*	4*			•	4*	AN960JD10LL	WASHER
4*	4*				4*	MS21042L3	NUT
							1
1	1					D412-702-309	HARNESS ASSEMBLY (NEW)
1*	1*					D3573-3	ADAPTER
1*	1*					D4088-041	SHOULDER HARNESS (NEW)
4*	4*					MS24693S272	SCREW
4*	4*					AN960JD10LL	WASHER
4*	4*					MS21042L3	NUT

* denotes that part is included in assembly above

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

BY: D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

continued next page...

DESIGN	9	DART AEROSPACE LTD					
DRAWN	9?	HAWKESBURY, ONTARIO, CAN					
CHECKED	B	DRAWING NO.	REV. A				
MFG. APPR.	N/A	DSI 9511	SHEET 3 OF 6				
APPROVED	140,	TITLE	SCALE				
DE APPR.	#	NEW SHOULDER HARNESS KITS	S NTS				
DATE 10.0	3.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS: NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WITHIN PERMISSION FROM DAY REPOSPACE.					

Dart Aerospace Ltd

W/O:			V	ORK ORDER CHANGE	ES				
DATE	STEP	PRO	CEDURE CH	IANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
Dowl No.		DAD #	F. 11.0.	•	NOD V	N 50		D	
Part No: PAR #:			Fault Ca	tegory:	NCH: Ye	s No DQ	A:	Date: _	
	Resolution:			Disposition: QA: N/C Clo				Date: _	•
NCR:		V	VORK OR	DER NON-CONFORMA	NCE (NC	R)			
DATE	OTED	Description of NC Corrective Action			on B	Verifi	cation Approval		Approval
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sigr Da	1& Sect	ction C Chief Eng		QC Inspector
		·							

NOTE: Date & initial all entries

REFERENCE ONLY

... continued from previous page

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
1		1				D412-702-311 /	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-1	BRACKET
1*	<u> </u>	1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	SCREW
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
4		4				NI32 1042L3	, NOT
1		1				D412-702-313	'HARNESS ASSEMBLY (NEW)
1*		1*			-	D3570-2	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	SCREW
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
			1			D440 700 045	LIADNIECO ACCEADO V (NETA)
1						D412-702-315	HARNESS ASSEMBLY (NEW)
1*			1*			D3573-5	ADAPTER
4*	.		4*			D4088-041	SHOULDER HARNESS (NEW)
4*			4*			MS24693S272	SCREW
4*			4*			AN960JD10LL	WASHER
4"			4-			MS21042L3	NUT
1		,	1			D412-702-317	HARNESS ASSEMBLY (NEW)
1*			1*			D3573-5	ADAPTER
1*			1*			D4088-041	SHOULDER HARNESS (NEW)
4*			4*			MS24693S272	SCREW
4*			4*			AN960JD10LL	WASHER
4*			4*			MS21042L3	NUT
						5446	
1		1				D412-702-321	HARNESS ASSEMBLY (NEW)
1*		1*			-	D3570-3	BRACKET
		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	BOLT
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT
1		1				D412-702-323	HARNESS ASSEMBLY (NEW)
1*		1*				D3570-4	BRACKET
1*		1*				D4088-043	SHOULDER HARNESS (NEW)
4*		4*				MS24694S50	BOLT
4*		4*				AN960JD10L	WASHER
4*		4*				MS21042L3	NUT

^{*} denotes that part is included in assembly above

continued next page...

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-O-01

BY: D. SHEPHERD (DE # 02)

DATE: 10.03.22
CERT. NO.: SH04-7
ISSUE NO.: 3

DESIGN	P	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA					
DRAWN	97						
CHECKED	_8	DRAWING NO.	REV. A				
MFG. APPR.	N/A	DSI 9511 s	HEET 4 OF 6				
APPROVED	140	TITLE	SCALE				
DE APPR.	#	NEW SHOULDER HARNESS KITS	NTS				
DATE 10.0	3.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED ON COMMUNICATED TO ANY OTHER PERSON WITHOUT WINTEN PERMISSION FROM DATE AEROSPACE LTD.					

Dart Aerospace Ltd

	-									
W/O:			WO	RK ORDER CHANG	GES					
DATE	STEP	PRO	PROCEDURE CHANGE			Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector
	!								:	
1000										
Part No	:	PAR #:	Fault Categ	jory:	NCR:	Yes N	lo DQ .	A:	_ Date: _	
	Re	esolution:	Disposition: QA: N/C Closed: [Date: _	
NCR:		,	WORK ORDE	R NON-CONFORM	ANCE	(NCR)				-
DATE	STEP	Description of NC	Description of NC Corrective Acti			Verifi			Approval	
	JILI	Section A	Initial Chief Eng	Action Description Chief Eng		Sign & Date	Sect	Section C	Chief Eng	QC Inspector
									-	
۱ ـ		T .	1 1				1		1	1

NOTE: Date & initial all entries

REFERENCE ONLY

... continued from previous page

QTY -341	QTY -343	QTY -345	QTY -347	QTY -349	QTY -351	Part Number	Description
' 2	2					D3542-1	BRACKET
7	3		4	1		D3571-1	GUIDE
, 2	2					D3571-3 /	GUIDE
12		2				D3572-041 /	GUIDE ASSEMBLY
! 12	6		6_	2		D3578-041 //	DOUBLER
2	2					D3610-041 /	BRACKET
/ 2	2					D3618-1	CAP
, 4	4			<u>-</u>		AN4-10A /	BOLT
j 2		2				AN4-16A	BOLT
` 4		4				AN4-25A	BOLT
4		4				AN4-27A 🕢	BOLT (DSI 9469)
2	2					AN4-44A //	BOLT
/ 2	2					MS24693S274 .	SCREW
⁾ 3	3			1		MS24694S56 🗸	SCREW
′ 10	2		8			MS24694S58 🗸	SCREW
1	1			1		MS24694S60 /	SCREW
26	6	20				AN960JD416 /	WASHER
4	4					AN960JD416L /	WASHER
12	6	6				MS21042L4	NUT
* 24	12		12	4		CR3212-4-4	RIVET

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH DAO # 01-O-01

BY: D. SHEPHERD (DE # 02)

DATE: _ CERT. NO.: _ ISSUE NO.: _ SH04-7

DESIGN	q?	DART AEROSPACE LTD					
DRAWN	97	HAWKESBURY, ONTARIO, CANADA					
CHECKED	A	DRAWING NO. REV.	Α				
MFG. APPR.	N/A	DSI 9511 SHEET 5 OF	- 6				
APPROVED	14	TITLE SCA	LE				
DE APPR.	-##	NEW SHOULDER HARNESS KITS N	TS				
DATE 10.0	3.18	COPYRIGHT © 2010 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.					

Dart	Aeros	pace	Ltd
------	-------	------	-----

W/O:	***************************************	WORK ORDER CHANGES									
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector				
ı											
Part No) •	PAR #· Fault Category: N	CR: Ve	No DO	Δ-	Date					

Resolution: _____ Disposition: _____ QA: N/C Closed: _____

Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)												
DATE		Description of NC		Corrective Action Section B	Verification		A							
	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector						
			:											
		•												
					;									
	-		<u> </u>		1									
	. *													

NOTE: Date & initial all entries

Work Order ID 60483

July 13, 2010 8:09:24 AM

Item ID:

D412-702-341

Revision ID:

Item Name:

13-Man Shoulder Harness, 3 point

Start Date: 7/13/10

QC:

Required Date: 7/13/10

Start Qty: 1.00 Req'd Qty: 1.00

Accept

Setup Start

Page 1

Cust Item ID:

Customer:

Tool ID

Reference:

Approvals:

Process Plan:

Date: Date:

Tooling:

0.00

0.00

SPC (Y/N):

Set Up/

Run Hours

Date:

Date:

Tool # Plan

Code

Start

Reject

Qty

Stop

Sequence ID/ Work Center ID Operation Description

Revision Nbr

Α

Draw Nbr DS19511

120

Packaging

Packaging

Packaging

PULL FROM STOCK:

Memo

1 X D412-702-341 B 5662

DISASSEMBLE KIT AND RETURN ALL ITEMS TO STOCK

130

Quality Control

QC21- Final Inspection - Work Order Release

Memo

0.00

Run

Accept

Qty

Stop

Reject

Insp. Number Stamp

W 100713

July 13, 2010 8:09:19 AM

Work Order ID: 60483

Parent Item:

D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point



Start Date: 7/13/10 Start Qty: 1.00

Required Date: 7/13/10

Required Qty: 1.00

Comments:

IPP Rev:A new issue DD 10.04.30 verified:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Status Issued	,
D412-702-301 Harness Assembly		Manufactured	No			105	Each	0.0000	2	-2	59923	1× 584	52 1/98
D412-702-303 Harness Assembly		Manufactured	No			105	Each	0.0000	2	ک 2-	9522 /	x 1846	y Ish
D412-702-305		Manufactured	No			105	Each	0.0000		ا-	9640	-	A
D412-702-307 Harness Assembly		Manufactured	No			105	Each	0.0000	1 	-1 _	1964 kg	C	
D412-702-309 Harness Assembly Harness Assembly		Manufactured	No			105	Each	0.0000	1 	-1	59642	d	?
D412-702-311		Manufactured	No			105	Each	0.0000	1 {	-1	19648	b	
Harness Assembly D412-702-313		Manufactured	No			105	Each	0.0000			9649		
Harness Assembly D412-702-315 Harness Assembly		Manufactured	No			105	Each	0.0000		ک ۱-	7650		

DU12-702-341

13 58462 (UN) 1/13 CG

July 13, 2010 8:09:19 AM

Work Order ID: 60483

Parent Item:

D412-702-341



rarent item: D412-702-341										
Parent Item Name: 13-Man Shoulder H	arness, 3 point						Start Date: 7 Start Qty: 1		Required D Required (ate: 7/13/10
D412-702-317	Manufactured	No		105	Each	0.0000	1	-1	Required	2ty. 1.00
	111				;			-1	59651	
Harness Assembly D412-702-321	Manufactured	No		105	Each	0.0000	1	-1	·	
Harness Assembly								=	59652	8
D412-702-323	Manufactured	No		105	Each	0.0000	1	-1	2	<i>)</i>
Harness Assembly									59653/	
D412-702-059	Manufactured	No		105	Each	6.0000	1	-1	55670	
Grommet									250.0	
			Location	Loc	<u>Oty</u>	Loc Code				
			FG122 55670		6					
D3761-1-041	Manufactured	No	33070	105	6 Each	1.0000	9	-9 ~		
HOOK & LOOP STRIP								·	55729	
			Location	Loc	· Oty	Loc Code	<u>:</u>			
			ST245		1				····	
D3542-1	Manufactured	No	57662	105	l Each	18.0000	2	-2		
Bracket	.vianataotarea							L	47170	14 C
			Location	Loc	: Qty	Loc Code	2			
·			ST245		18					
			32606 51309		2 4			513	509 /b	/ , ,
					•					1 1 1

12

59051

July 13, 2010 8:09:20 AM

Work Order ID: 60483

Parent Item:

D412-702-341

Parent Item Name:

13-Man Shoulder Harness, 3 point



Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

D3571-1

Guide

Manufactured

105

Each 17.0000

D3571-3

Guide

Manufactured No

No

ST245A 58450

Location

17 Each 105

17

Loc Oty

11.0000

Loc Code

Loc Code

Manufactured No Location Loc Qty ST245A 11 57227 57363 10 105

Each

10.0000

Guide Assembly

D3572-041

D3578-041

Manufactured No Location Loc Qty Loc Code ST260 10 58451 2 59305 8 105 Each 58.0000

Doubler

Location ST244A 52071 Loc Qty 58 58 Loc Code

July 13, 2010 8:09:21 AM

Work Order ID: 60483

Parent Item:

D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point



Start Date: 7/13/10

Start Qty: 1.00

-2 ~

Required Qty: 1.00

D3610-041

Bracket

D3618-1

Manufactured No

Purchased

Manufactured

No

No

ST244A 47144

Location .

Location

105

Loc Oty 8 105 Each

Each

77.0000

Loc Code

8.0000

Loc Code

Required Date: 7/13/10

CAP

AN4-10A

Bolt

AN4-16A

Bolt

Purchased No ST244A

55669

Loc Qty 77 77 105

Each 122.0000

Loc Qty Location 1 Loc Code ST356 122 113422 22 114523 100 105 155.0000 Each

Loc Qty Loc Code Location ST358 155 114523 55 115016 50 115159 50

July 13, 2010 8:09:21 AM

Work Order ID: 60483

Parent Item:

D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point



Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Oty: 1.00

AN4-25A

BOLT

AN4-27A

AN4-44A

Bolt

Bolt

Purchased

Purchased

Purchased

Purchased

No

No

No

No

105 Each 82.0000

Location Loc Qty Loc Code ST360 82 111605 32 114330 50

Each

52.0000

M11/605

Location Loc Qty Loc Code ST360 52 2 113538 114752 50 105 Each 87.0000

105

M113538

Location Loc Oty Loc Code ST360 87 104806 87 105 Each 63.0000

Screw

MS24693-S274

Location Loc Qty ST288 63 108560 13 114718 50

Loc Code

108860

July 13, 2010 8:09:22 AM

Work Order ID: 60483

Parent Item:

D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

Purchased

No

No

No

No

No

MS24694-S56

SCREW

MS24694-S58

Purchased

Screw

MS24694-S60

Purchased

Screw

NAS1149D0463J Purchased

Washer

AN960JD416L

NAS1149D0416J Purchased

Washer



Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

Location Loc Qty Loc Code ST289A 119

104407

105

119 105 Each

Each

120.0000

119.0000

10

Location Loc Qty Loc Code ST289A

104407

105

120 120 Each

119.0000

Location Loc Qty Loc Code ST289A 119

119 104407

105 Each

10.0000

26

Location Loc Qty Loc Code ST351 10

108827

10 105 Each

277

277.0000

Location Loc Oty Loc Code ST346 277

110153

110163

July 13, 2010 8:09:22 AM

Work Order ID: 60483

Parent Item:

D412-702-341

Parent Item Name: 13-Man Shoulder Harness, 3 point

Start Date: 7/13/10

Required Date: 7/13/10

Start Qty: 1.00

Required Qty: 1.00

12

4,188.000

Loc Code

-12

MS21042L4

Purchased

Purchased

No

No

CR3212-4-4

Cherry Rivet

Location	Loc Qty					
ST300		4188				
113422		68				
114523	28					
114718		92				
114784		2000				
115108		2000				
	105	Each				

105

Each

116.0000

Location	Loc Qty	Loc Code
ST311	116	
111359	16	
114716	100	